5

10

ARRANGEMENT FOR REDUCING APPLICATION EXECUTION BASED ON A DETERMINED LACK OF FLOW CONTROL CREDITS FOR A NETWORK CHANNEL

ABSTRACT OF THE DISCLOSURE

An InfiniBandTM network node includes a network interface, a system memory, a memory controller configured for controlling access to the system memory, and a processor. The network interface is configured for outputting data packets according to a prescribed flow control protocol that specifies flow control resources. The network interface also is configured for outputting a data flow interruption request to the memory controller based on a determined depletion of the flow control resources. The memory controller, in response to reception of the data flow interruption request, restricts access to the system memory. Hence, the processor, in response to detecting the restricted access to the system memory, reduces execution of a prescribed application resource based on the determined depletion of the flow control resources. Hence, the supply of data for the data packets is reduced based on the reduced execution of the prescribed application resource, enabling flow control protocols to be maintained while preserving processor and memory resources for other application resources.